

REPORT OF COMMITTEE ON RESEARCH 1964 - 65

## I. INTRODUCTION: the Need for Research at Loyola.

In view of the recent report of the Parent Royal Commission on Education in the Province of Quebec whose suggestions limit any development of a graduate school at Loyola for an indefinite period of time, it is felt that some immediate steps must be taken to encourage the further development of research facilities in Humanities, Social Sciences, Science, and Engineering.

Part of the urgency lies in the fact that the well-qualified members of faculty may consider it to their advantage to leave, and well-qualified prospective members may not join the faculty because of insufficient research facilities.

There is a special problem in establishing any structure for humanities research. To be sure, in many areas of the social and the behavioral sciences, research projects can often be capable of a positive estimate and determination approaching that of the natural sciences. In such cases the facilities, the structure, and the methods of research activity may tend to follow that of research in the natural sciences. And here too, private and government support may often be available, as in the natural sciences. But creative, speculative, and scholarly "research" in the humanities (and especially in the fields of literature, the arts, philosophy, theology, and history) generally lack this scientific precision in the definition of a project and even in its results, so that the interest of government and industry is not usually possible.

## II. RESEARCH in the HUMANITIES.

In the Humanities there is no insistence on the principle of "publish or perish". Nevertheless, unless a professor keep abreast of the latest developments in his field, and unless he is productive and creative in his specialized subject, academic life at Loyola will not have the atmosphere to challenge the ambitious student. Several attempts in this direction are already underway, for example, in the Theology Department with its text, Loyola Quodlibets, and in

its colloquium course (Theology 401).

Research in the Humanities is hardly imaginable except in the end result of writing a book or paper, and especially in the means to this end, obtaining or having easy access to relevant books and articles published on particular problems or on specialized areas of study. In these speculative, creative, and scholarly areas of the Humanities, there are certain facilities which are not only desirable for encouraging research but are necessary if Loyola is to attract creative and speculative scholars and is to retain those it already has. These needs are outlined on page 3 of this report.

## III. RESEARCH in the SOCIAL SCIENCES.

In the Social Sciences, pure and applied, private and government support is available for research. Not only such general fields as economics, communications, political science, sociology, and psychology are of interest to business and industry, but also the many various aspects of research in commerce such as taxation, pensions, insurance, trade, managerial organization, accounting and computer technology.

In order to foster initial research in the Social Sciences so as to encourage investment from these private and government sources, there are special needs which must be fulfilled and which are outlined on page 3 of this report.

#### IV. RESEARCH in SCIENCE and ENGINEERING

Considerable research is presently being done in the faculties of Science and Engineering by many well-qualified and experienced professors. This work is being financed largely from outside sources, and given the proper help, it could grow rapidly.

In regard to teaching, stepped-up research is also necessary to expose students to the atmosphere and the activity of research with up-to-date

equipment. Some courses, such as Geotechnical Science 408, Chemistry 450, and Physics 405, are designed with this approach in mind, since they provide limited basic independent research projects for Senior students. The transfer of research activities to "unlimited charter universities" would make investigations impossible during the academic year. Of course, very expensive equipment (e.g. particle accelerators) could be pooled. The special research needs of Science and Engineering are outlined on page 4 of this report.

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### V. RESEARCH NEEDS

### A. In the Social Sciences and the Humanities:

- 1. <u>Library Facilities</u> <u>Library acquisitions</u> should be considered a capital investment. Extended facilities would make Loyola a more desirable place for ambitious scholars. To this end there is need principally for a special budget for the acquisition of research materials (<u>viz.</u>, books, journals, pamphlets, etc.) which would be over-and-above the regular departmental Library budgets.
- 2. Research Associates and Research Assistants In the Humanities and the Social Sciences, the research associates correspond to the research assistants in scientific work. Their work would include such tasks as compiling bibliographies, locating books and articles, helping with surveys, and organizing and processing statistical data. They should be able to devote their entire time to their work, have an academic background and know several languages. Honours students, hired as research assistants, could be of some assistance here; in addition, this work would be of greater advantage to them than the types of employment they now undertake on a part-time basis during the year or during the summer months.
- 3. Editor The editor in the Humanities and the Social Sciences, corresponds to the laboratory technician in Scientific research. He examines a manuscript for punctuation and correct current usage, prepares illustrations, deals with the printer, works with the typist in the final edition, and corrects galley proofs. He should also

be able to make tape recordings of lectures, oversee the typing of such recordings, and prepare them for printing. He should be qualified in the Humanities and Social Sciences areas, and even in particular disciplines; and, as the need for his services would increase, additional editors would be more specialized.

- Typists A pool of typists is necessary for Humanities and Social Sciences research, and should include persons with experience in particular disciplines. Translators, however, should not be necessary since the amount and importance of language in this kind of research ought to exclude the use of any ad hoc translations. Rather, as stated in A.3 above, there is a great need for professional editorial services.
- 5. Readily accessible <u>duplicating facilities</u>, including a Xerox machine outside the Library, should be made available to Faculty at all times.

## B. In Science and Engineering:

 Operational Funds and Capital Investment Grants - Some departments will need a larger proportion of their grants as operational funds for the time being.

<u>Manpower</u>, in the form of skilled laboratory assistants and technicians these would fall into the category of special instrument operators, general duty technicians, and personal research assistants.

#### VI. The ORGANIZATION of the LOYOLA RESEARCH INSTITUTE

In order to provide the facilities and to fulfil the needs outlined in Section V., and to help launch research on this wide scale at Loyola, some College-wide organization will be necessary. For whatever research is undertaken on an individual, departmental, or inter-departmental basis, some reference to such a College-wide body would be necessary, especially in the launching of research projects in their early stages before private or government assistance would be available.

In view of these needs and problems of research in the Humanities, the Social Sciences, Science, and Engineering at Loyola, the Research Committee recommends the formation of the LOYOLA RESEARCH INSTITUTE. Similar Institutes were operated by McMaster University and by the Ontario Agricultural College before they established their respective graduate schools. The National Research Council has already been approached for their opinion concerning the establishment of a Loyola Research Institute — and the reaction was sympathetic and favourable.

It would seem that such an Institute would also be an excellent means for fostering inter-disciplinary cooperation in exploring borderline fields in which so much of modern research has been moving with spectacular results.

The organization of the proposed Loyola Research Institute is shown in Table 1 on page 7 of this report. The role and function of the Institute would be as follows:

The Board of Directors. The Board of Directors of the Institute is responsible to the President and to the Board of Governors of Loyola College. It may form sub-committees to consider research in different areas. It would consist of one senior member actively engaged in research to be elected from each department. The Board would elect its own Chairman for a two-year term.

Executive Secretary. He is responsible solely for the administrative operation of the Institute. He is concerned with the direction of laboratory technicians; with the establishment of a pool of part-time typists, editors, and translators; with the maintenance of files of all papers and publications produced; and with the preparation of an annual report to be sent to all parties who have contributed and to possible future contributors.

## VII. FINANCING

The financing of the Institute could come from four different sources:

- a. College contributions;
- b. a 10 o/o overhead charge on the operational research grants or their equivalents;
- c. government funds in the form of block grants made to the Institute;
- d. non-government funds solicited by the Institute from private foundations and industry.

Estimates			\$
Executive Secretary		• • • •	5,000
Humanities and Social Sci	ences Resea	rch	
Library Research Budget	• • •		8,000
Research Associate	•••	• • •	8,000
Editor	•••	• • •	7,000

Science and Engineering Research

Table 2 shows the present and the projected costs of assistance available to researchers, with an indication of College and of private contributions towards the cost.

Approximately \$70,000 would be needed to run the Science branch of the Institute when fully operational. This would include limited funds for feasibility studies and emergencies. It does not, however, include expendable supplies and special instruments, which are to be financed from personal research grants as at present.

R. Hinners (Chairman)

T. Nogrady

Rev.G. Henkey

M. Blanar

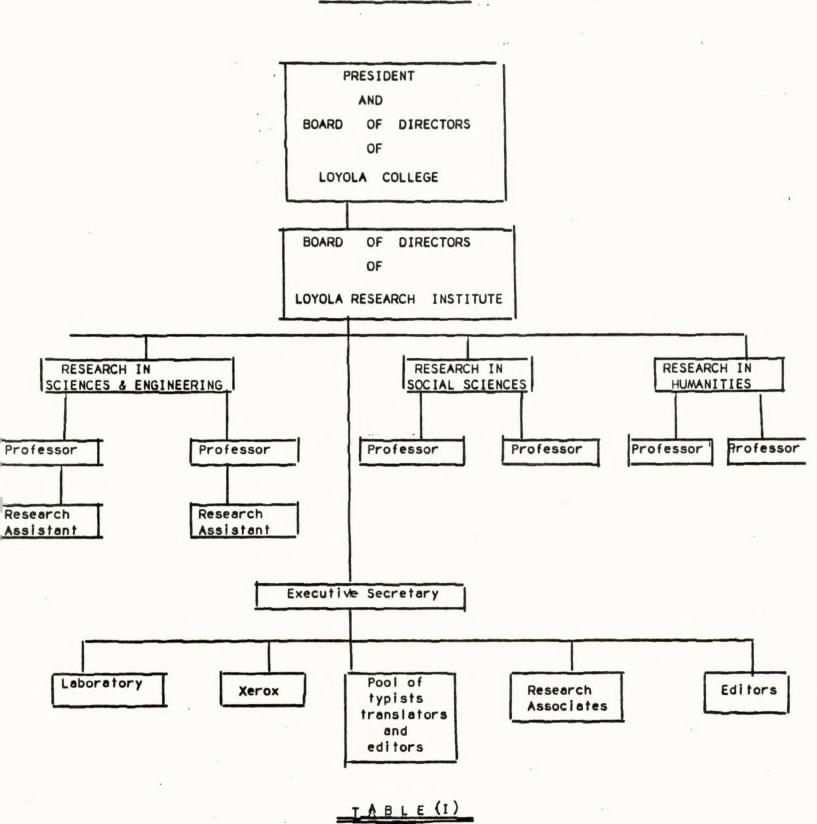
S. Dorrance

Rev. H. MacPhee, S.J.

Rev.S. Drummond, S.J.



# ORGANIZATION CHART



## RESEARCH ASSISTANTS

	1964-6 Full	š <u>s</u>	Part		Full	1965-66 (projected) Part			Planned Full	
Department	Time	Salary	Time	Salary	Time	Salary	Time	Salary	Time	Salary
Biology	-	-	-	-	-	· <b>-</b>	-	_	2	8,000
Chemistry	2	7,100	2	1,800	2	7,600	2	1,800	4	16,000
Geotechnical	-	-	1	1,000	-	-	. 1	3,000	2	8,000
Physics	1*	4,800		-	1*	4,800	1*	1,000	4	16,000
General duty	2*	8,500	1*	2,400	2*	8,500	1*	2,400	4	16,000
TOTAL	5	20,400	4	5,200	5	20,900	5	8,200	16	64,000
TOTAL			\$25,600			4	29,100			
PAID BY THE COLLEGE 15,700 (61%)			16,700 (57%)							

<sup>\*</sup> Paid by the College